
1. Alphabet

Program Name: Alphabet.java

Input File: alphabet.dat

Being a programmer and all, we have to know whether or not sequences of parentheses are properly ordered. For example, we know that “(())()” is properly ordered; however, “())(“ is not. But what if instead of parentheses, we have letters?

This is a bit different. If we have letters, then we have to know what characters match one another. Well, this is simple; it’s just going to be the character on the opposite half of the alphabet. For example, A and Z match, B and Y match, C and X match, and so on, until you see that M and N match. Furthermore, they can match forward and backward. This means that “AZ” and “ZA” are properly ordered sequences of letters. And for a more complicated example, “ZNMA” would also match.

Input

The first line will contain the number of test cases to follow. Each test case contains a string of uppercase letters.

Output

Output “YES” if the string of letters is properly ordered; otherwise, print “NO”.

Example Input File

```
4
AZ
ZA
CCXX
BMYN
```

Example Output to Screen

```
YES
YES
YES
NO
```